

VVV		VVV	MMM	MMM	SSSSSSSSSSSS	LLL	IIIIIIII	0000000000	
VVV		VVV	MMM	MMM	SSSSSSSSSSSS	LLL	IIIIIIII	0000000000	
VVV		VVV	MMM	MMM	SSSSSSSSSSSS	LLL	IIIIIIII	0000000000	
VVV		VVV	MMMMMM	MMMMMM	SSS	LLL	III	000	000
VVV		VVV	MMMMMM	MMMMMM	SSS	LLL	III	000	000
VVV		VVV	MMMMMM	MMMMMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSSSSSSSSS	LLL	III	0000000000	
VVV		VVV	MMM	MMM	SSSSSSSSSS	LLL	III	0000000000	
VVV		VVV	MMM	MMM	SSSSSSSSSS	LLL	III	0000000000	
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSS	LLL	III	000	000
VVV		VVV	MMM	MMM	SSSSSSSSSSSS	LLLLLLLLLLLLLLLL	IIIIIIII	0000000000	
VVV		VVV	MMM	MMM	SSSSSSSSSSSS	LLLLLLLLLLLLLLLL	IIIIIIII	0000000000	
VVV		VVV	MMM	MMM	SSSSSSSSSSSS	LLLLLLLLLLLLLLLL	IIIIIIII	0000000000	

★★F

[illegible]

```

RRRRRRRR      EEEEEEEEEEE      OOOOOO
RRRRRRRR      EEEEEEEEEEE      OOOOOO
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RRRRRRRR      EEEEEEEEEEE      QQ              QQ
RRRRRRRR      EEEEEEEEEEE      QQ              QQ
RR      RR      EE              QQ              QQ
RR      RR      EE              QQ      QQ      QQ
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RR      RR      EEEEEEEEEEE      OOOO      QQ
RR      RR      EEEEEEEEEEE      OOOO      QQ

```

XPRINT ('File: CLIMAC.REQ, Version V04-000, Edit 3, TJP, 14-DEC-1978')

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MODULE: CLIMAC.REQ

FACILITY: COMMAND LANGUAGE UTILITY INTERFACE

ABSTRACT: REQUIRE FILE WHICH DEFINES THE CLI INTERFACING MACROS

HISTORY:

VERSION: X01.00

AUTHORS: T.J. PORTER + M.L. JACK 03-MAY-77

MODIFIED BY:

V03-001 GAS0016 GERRY SMITH 28-OCT-1981
FIX \$CLIQUALCODES MACRO.

V01-001 T.J. PORTER 14-DEC-1978
CHANGE QDFLGS DEFAULT TO NULL STRING

V01-001 C. PETERS 18-APR-1978
GIVE QDFLGS A DEFAULT VALUE OF 0.

V01-001 W.W. CLARK 17-OCT-1977
ADD QDFLGS AND USRVAL TO \$CLIQUALDESC

--

++

FUNCTIONAL DESCRIPTION:

THIS REQUIRE FILE DEFINES THE BLISS MACROS TO BE USED BY A UTILITY WHICH IMPLEMENTS A COMMAND OF THE VMS OPERATING SYSTEM. THE MACROS ARE THOSE FOR DECLARING THE BLOCKS USED IN THE COMMUNICATION BETWEEN THE UTILITY AND THE RESULT PARSER OF THE COMMAND LANGUAGE INTERPRETER. THE NAMES AND CALLING SEQUENCES ARE AS DESCRIBED IN VMS DOCUMENTATION.

--

CREATE A CLI REQUEST DESCRIPTOR BLOCK

KEYWORDMACRO

```
$CLIREQDESC(RQTYPE, BITNUM=0, RQFLGS,
             ERRACT=0, PRSACT=0, ABSACT=0,
             QUALST=0)=
```

BLOCK[CLISQ_REQDESC,BYTE]

INITIAL(

```
    BYTE(%NAME('CLISK_',RQTYPE)),
    BYTE(BITNUM),
    CLISBITFLD(BYTE,CLISV_,RQFLGS),
    BYTE(0),
    LONG(ERRACT),
    LONG(0,0),
```

```
    LONG(PRSACT),
    LONG(ABSACT),
    LONG(QUALST))%;
```

```
! REQUEST TYPE BYTE
! PARAMETER BIT NUMBER
! FLAGS BYTE
! STATUS BYTE
! ERROR ACTION ROUTINE
! PARAMETER QUADWORD
! STRING DESCRIPTOR
! PARAMETER PRESENT ACTION ROUTINE
! PARAMETER ABSENT ACTION ROUTINE
! QUALIFIER DESCRIPTOR LISTHEAD
```

CREATE A CLI PARAMETER QUALIFIER DESCRIPTOR

KEYWORDMACRO

```
$CLIQUALDESC(QDCODE, QDFLGS = , TRUACT = 0, FLSACT = 0, USRVAL,
             TSTLST, SETLST, CLRLST) =
```

BLOCK[CLISQUALSIZE(USRVAL,TSTLST,SETLST,CLRLST),BYTE]

ALIGN(0)

INITIAL (

```
    BYTE(CLISQUALSIZE(USRVAL,TSTLST,SETLST,CLRLST)),
```

```
    BYTE(CLISQUALNAME(QDCODE)),
```

```
    %IF %NULL(USRVAL)
```

```
        %THEN CLISBITFLD(BYTE,CLISV_,QDFLGS)
```

```
        %ELSE CLISBITFLD(BYTE,CLISV_,(QDUSRV,%REMOVE(QDFLGS))) %FI,
```

```
    BYTE(0),
```

```
    LONG(0,0),
```

```
    LONG(TRUACT),
```

```
    LONG(FLSACT),
```

```
    %IF %NULL(USRVAL) %THEN %ELSE LONG(USRVAL), %FI
```

```
    %IF %NULL(%REMOVE(TSTLST)) %THEN BYTE(0) %ELSE CLISBITLIST(%REMOVE(TSTLST))%FI,
```

```
    %IF %NULL(%REMOVE(SETLST)) %THEN BYTE(0) %ELSE CLISBITLIST(%REMOVE(SETLST))%FI,
```

```
    %IF %NULL(%REMOVE(CLRLST)) %THEN BYTE(0) %ELSE CLISBITLIST(%REMOVE(CLRLST))%FI)%;
```

```

:
: CREATE THE END OF A QUALIFIER LIST
MACRO
:
: $CLIQUALEND = BYTE ALIGN(0) INITIAL(0)%,
: DECLARE THE NAMES OF CLI QUALIFIER CODES
:
: $CLIQUALCODES(UTILNAME) =
:   %IF %DECLARED(%QUOTE %QUOTE CLISUTILQUALPRE)
:     %THEN UNDECLARE %QUOTE %QUOTE CLISUTILQUALPRE; %FI
:   MACRO CLISUTILQUALPRE =
:     %NAME('CLISK_',CLISTAKE4(UTILNAME),'_')%QUOTE%;
:   EXTERNAL LITERAL
:   CLISQUALNAME(%REMAINING)%,
:
: THE FOLLOWING IS A SET OF UTILITY MACROS FOR ALL THE ABOVE
:
: CLISBITS(A,B)[] =
:   CLISMASK(%NAME(A,B))   CLISOR(%REMAINING)   CLISBITS(A,%REMAINING) %,
:
: CLISMASK(I,P,S,E) =
:   (1^((P)+(S)) - 1^(P)) %,
:
: CLISOR[] =
:   OR %,
:
: CLISBITFLD(ALLOC,PREFIX,VALUE) =
:   %IF %NULL(VALUE)
:     %THEN ALLOC(0)
:   %ELSE ALLOC(CLISBITS(PREFIX,%REMOVE(VALUE)))
:   %FI %,
:
: CLISLENGTH[] = %LENGTH %,
:
: CLISBITLIST[] = BYTE(%LENGTH,%REMAINING)%,
:
: CLISQUALSIZE(UVAL,TBLST,SBLST,CBLST) =
:   23 +
:     %IF %NULL(UVAL) %THEN 0 %ELSE 4 %FI +
:     %IF %NULL(%REMOVE(TBLST)) %THEN 0 %ELSE CLISLENGTH(%REMOVE(TBLST))%FI +
:     %IF %NULL(%REMOVE(SBLST)) %THEN 0 %ELSE CLISLENGTH(%REMOVE(SBLST))%FI +
:     %IF %NULL(%REMOVE(CBLST)) %THEN 0 %ELSE CLISLENGTH(%REMOVE(CBLST))%FI %,
:
: CLISTAKE4(SOMESTRING) = CLISJOIN4(%EXPLODE(SOMESTRING))%,
:
: CLISJOIN4(A,B,C,D) = %STRING(A,B,C,D)%,
:
: CLISQUALNAME[QUALNAME] =
:   %NAME(CLISUTILQUALPRE,CLISTAKE4(QUALNAME))%;

```


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VAX/VMS V4.0

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